mSATA 6Gbps MO-300

32 GB 64 GB 128 GB 256 GB

INTRODUCTION

The Integral mSATA 6Gbps MLC SSD delivers all of the advantages of flash memory technology with the Serial ATA III interface and conforms to the mSATA standard generated by JEDEC, known as MO-300.

mSATA is a small form factor SSD that is around 8 times smaller than the typical 2.5 inch SSD / HDD available. It is ideal for adding storage to small form factor and embedded systems.

The SATA III super-fast performance that is delivered by the Integral mSATA 6Gbps, together with its reliability and low power operation make it the ideal SSD drive for embedding into new systems.

FEATURES

- mSATA form factor with SATA III 6Gbps interface (backwards compatible with SATA 3Gbps and SATA 1.5Gbps)
- Performance: Faster boot than HDD, Faster access to applications, enhanced productivity and increased efficiency
- Fully compatible with devices and OS that support the SATA standard with mSATA interface
- Non-volatile Flash Memory for outstanding data retention – less likely to fail than HDD
- Ultra-efficient Block Management and Wear Levelling
- Error Correction Code
- Lower Power Consumption
- Shock resistance – No moving parts enable the product to be used in tougher conditions
- Silent operation - Noiseless and low heat dissipation
- Supports S.M.A.R.T. — Self-Monitoring, Analysis and Reporting Technology
- Supports TRIM
- RoHS compliant
- CE and FCC tested
- 2 Year Warranty

Technical Features

- MLC-NAND Flash Technology
- Cache Size: 32GB, 64GB & 128GB = 256MB DDR 3, 256GB = 512MB DDR 3
- mSATA
- JEDEC standard - M0-300
- Supports TRIM (OS support required)
- Supports S.M.A.R.T.
- CE and FCC certified and RoHs compliant

PERFORMANCE		
32GB	Read	368MB/s (up to)*
	Write	236MB/s (up to)*
64GB	Read	369MB/s (up to)*
	Write	240MB/s (up to)*
128GB	Read	375MB/s (up to)*
	Write	240MB/s (up to)*
256GB	Read	350MB/s (up to)*
	Write	240MB/s (up to)*
INTERFACE		
Interface		SATA III 6Gbps Also Compatible with SATA II 3Gbps and SATA 1.5Gbps
*Based on internal testing		
RELIABILITY		
MTTF		2,000,000 hours
ECC algorithm		24 9-bit Symbols Correction per 512 9-bit Symbol
POWER CONSUMPTION		
Supply Voltage		3.3V
Power Consumption (mA)		Read = 850min / 900max
		Write = 580min / 830max
		Idle = 80
ECC algorithm		Supports 72-bit ECC correct per 1K Byte
MTBF		>1 Million Hours
ENVIRONMENTAL		
Operating Temp		0° - +70°C
Non - Operating Temp		-40° - +85°C
Humidity		RH 90% under 40C in operation
PHYSICAL		
Length		50.8mm
Width		29.85mm
Height		3.8mm
Weight		8g
Length (Packed)		115mm
Width (Packed)		132mm
Height (Packed)		57mm
Weight (Packed)		58g
WARRANTY		
2 years		

CAPACITY	PART CODE	BARCODE (EAN)
32GB	INSSD32GMSA6M	5055288421653
64GB	INSSD64GMSA6M	5055288421660
128GB	INSSD128GMSA6M	5055288421677
256GB	INSSD256GMSA6M	5055288421684

1GB = 1,000,000,000 bytes. Formatted capacity is less.
This device should not be used as your sole backup.
Product design and specification subject to change or modification without notice. E&OE.
All trademarks acknowledged.
For warranty information please visit www.integralmemory.com/warranty